TEST REPORT

Product	:	Apex Stunt Car
Trade mark	:	N/A
Model/Type reference	:	7606478, EP3219
Serial Number	:	N/A
Report Number	:	EED32Q80294401
FCC ID	:	2BFG7INDG7606478
Date of Issue	:	Mar. 22, 2024
Test Standards	:	47 CFR Part 15 Subpart C
Test result	:	PASS

Prepared for:

Elite Production Ltd.
Room 9, Floor 13, Block B, Jueshi Building, Jiabing Road Luohu District, Shenzhen, 518001, Guangdong Province, China

Prepared by:

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	Aaron Ma		

Check No.: 8448120324

1 Version

Version No.	Date	Description
00	Mar. 22, 2024	Original

2 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15 Subpart C Section 15.203	ANSI C63.10-2013	PASS
AC Power Line Conducted Emission	47 CFR Part 15 Subpart C Section 15.207	ANSI C63.10-2013	N/A
Field Strength of the Fundamental Signal	47 CFR Part 15 Subpart C Section 15.249 (a)	ANSI C63.10-2013	PASS
Spurious Emissions	47 CFR Part 15 Subpart C Section 15.249 (a)/15.209	ANSI C63.10-2013	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15 Subpart C Section 15.249(a)/15.205	ANSI C63.10-2013	PASS
20dB Occupied Bandwidth	47 CFR Part 15 Subpart C Section 15.215 (c)	ANSI C63.10-2013	PASS

Remark:

N/A: The product is power by battery.

Company Name and Address shown on Report, the sample(s) and sample Information were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
Model: 7606478, EP3219
Only the model 7606478 was tested. Their electrical circuit design, layout, components used and internal wiring are identical. Only the sales channel is different.

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4 General Information

4.1 Client Information

Applicant:	Elite Production Ltd.
Address of Applicant:	Room 9, Floor 13, Block B, Jueshi Building, Jiabing Road Luohu District ,Shenzhen, 518001, Guangdong Province, China
Manufacturer:	Elite Production Ltd.
Address of Manufacturer:	Room 9, Floor 13, Block B, Jueshi Building, Jiabing Road Luohu District ,Shenzhen, 518001, Guangdong Province, China
Factory:	Shantou Jinying Toys Co., Ltd.
Address of Factory:	Dongqianxi Industrial Zone, Lianxia Town, Chenghai District, Shantou, Guangdong Province, China

4.2 General Description of EUT

Product Name:	Apex Stunt Car
Model No.:	7606478, EP3219
Test Model No.:	7606478
Trade mark:	N/A
Product Type:	☐ Mobile ☐ Portable ☒ Fix Location
Test Power Grade:	Default
Test Software of EUT:	N/A
Operation Frequency:	2447MHz ~2477MHz
Number of Channel:	16
Modulation:	GFSK
Antenna Type:	PCB Antenna
Antenna Gain:	0.12dBi
Power Supply:	Battery DC 3.0V
Test Voltage:	DC 3.0V
Sample Received Date:	Mar. 12, 2024
Sample tested Date:	Mar. 12, 2024 to Mar. 16, 2024

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2447MHz	2	2449MHz	3	2451MHz	4	2453MHz
5	2455MHz	6	2457MHz	7	2459MHz	8	2461MHz
9	2463MHz	10	2465MHz	11	2467MHz	12	2469MHz
13	2471MHz	14	2473MHz	15	2475MHz	16	2477MHz

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test Mode	Tx/Rx	RF Channel		
		Low(L)	Middle(M)	High(H)
GFSK	2447MHz ~2477MHz	Channel 1	Channel 9	Channel 16
		2447MHz	2463MHz	2477MHz

4.3 Test Environment and Mode

Operating Environment:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
Test mode:	
Transmitting mode:	Keep the EUT in transmitting mode with modulation.

4.4 Description of Support Units

The EUT has been tested independently.

4.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd
Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China
Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385
No tests were sub-contracted.
FCC Designation No.: CN1164

4.6 Deviation from Standards

None.

4.7 Abnormalities from Standard Conditions

None.

4.8 Other Information Requested by the Customer

None.

4.9 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-18GHz)
3	Radiated Spurious emission test	3.3dB (9kHz-30MHz)
		4.3dB (30MHz-1GHz)
		4.5dB (1GHz-18GHz)
		3.4dB (18GHz-40GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

5 Equipment List

3M Semi-anechoic Chamber (2)- Radiated disturbance Test					
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05/22/2022	05/21/2025
Receiver	R&S	ESCI7	100938-003	09/22/2023	09/21/2024
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	9163-618	05/22/2022	05/21/2025
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04/15/2021	04/14/2024
Multi device Controller	maturo	NCD/070/10711112	---	---	---
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	04/15/2021	04/14/2024
Microwave Preamplifier	Agilent	8449B	3008A02425	06/20/2023	06/19/2024
Test software	Fara	EZ-EMC	EMEC-3A1-Pre	---	---

3M full-anechoic Chamber					
Equipment	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. Date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
RSE Automatic test software	JS Tonscend	JS36-RSE	10166	---	---
Receiver	Keysight	N9038A	MY57290136	01-09-2024	01-08-2025
Spectrum Analyzer	Keysight	N9020B	MY57111112	01-19-2024	01-18-2025
Spectrum Analyzer	Keysight	N9030B	MY57140871	01-13-2024	01-12-2025
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-28-2021	04-27-2024
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-15-2021	04-14-2024
Horn Antenna	ETS-LINDGREN	3117	57407	07-04-2021	07-03-2024
Preamplifier	EMCI	EMC184055SE	980597	04-13-2023	04-12-2024
Preamplifier	EMCI	EMC001330	980563	03-28-2023	03-27-2024
Preamplifier	JS Tonscend	TAP-011858	AP21B806112	07-25-2023	07-24-2024
Communication test set	R&S	CMW500	102898	12-14-2023	12-13-2024
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	04-11-2023	04-10-2024
Fully Anechoic Chamber	TDK	FAC-3	---	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	---	---
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	---	---
Cable line	Times	EMC104-NMNM-1000	SN160710	---	---
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	---	---
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	---	---
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	---	---
Cable line	Times	HF160-KMKM-3.00M	393493-0001	---	---

6 Test results and Measurement Data

6.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
EUT Antenna:	Please see Internal photos
The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0.12dBi.	

6.2 Radiated Spurious Emissions

Test Requirement: 47 CFR Part 15C Section 15.249 and 15.209 and 15.205

Test Method: ANSI C63.10

Test Site: Measurement Distance: 3m (Semi-Anechoic Chamber)

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10kHz	Average

Limit: (Spurious Emissions)

Frequency	Field strength (microvolt/meter)	Limit (dBμV/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

Limit: (Field strength of the fundamental signal)

Frequency	Limit (dBμV/m @3m)	Remark
2400MHz-2483.5MHz	94.0	Average Value
	114.0	Peak Value

Test Setup:

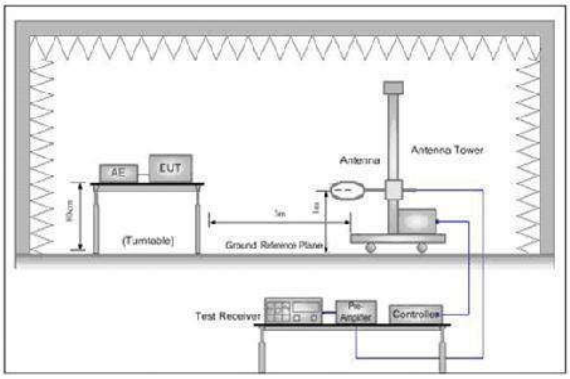


Figure 1. Below 30MHz

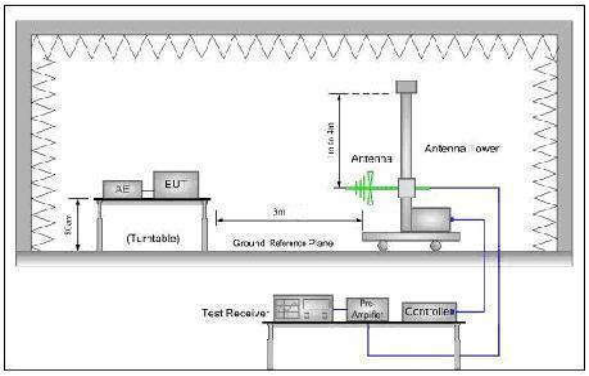


Figure 2. 30MHz to 1GHz

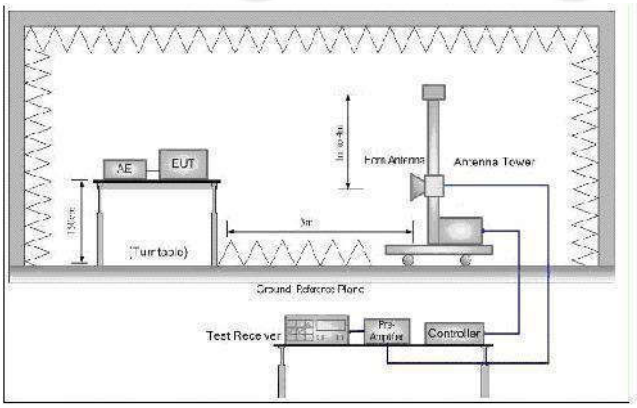


Figure 3. Above 1GHz

Test Procedure:

Below 1GHz test procedure as below:

The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.

The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rota table table was turned from 0 degrees to 360 degrees to find the maximum reading.

The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre).

Test the EUT in the lowest channel ,middle channel, the Highest channel

The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.

Repeat above procedures until all frequencies measured was complete.

Test Mode: Transmitting mode

Test Results: Pass

Measurement Data

Field Strength Of The Fundamental Signal:

Test mode:	Transmitting (lowest channel)							
Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
2446.81	10.23	52.90	63.13	114.00	-50.87	Pass	H	PK
2446.81	10.23	44.24	54.47	94.00	-39.53	Pass	H	AV
2447.16	10.23	48.59	58.82	114.00	-55.18	Pass	V	PK
2447.16	10.23	40.03	50.26	94.00	-43.74	Pass	V	AV

Test mode:	Transmitting (middle channel)							
Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
2462.86	10.29	52.37	62.66	114.00	-51.34	Pass	H	PK
2462.86	10.29	40.23	50.52	94.00	-43.48	Pass	H	AV
2462.94	10.29	48.40	58.69	114.00	-55.31	Pass	V	PK
2462.94	10.29	39.56	49.85	94.00	-44.15	Pass	V	AV

Test mode:	Transmitting (highest channel)							
Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
2477.00	10.35	53.09	63.44	114.00	-50.56	Pass	H	PK
2477.00	10.35	47.82	58.17	94.00	-35.83	Pass	H	AV
2476.83	10.35	47.85	58.20	114.00	-55.8	Pass	V	PK
2476.83	10.35	40.21	50.56	94.00	-43.44	Pass	V	AV

Note:

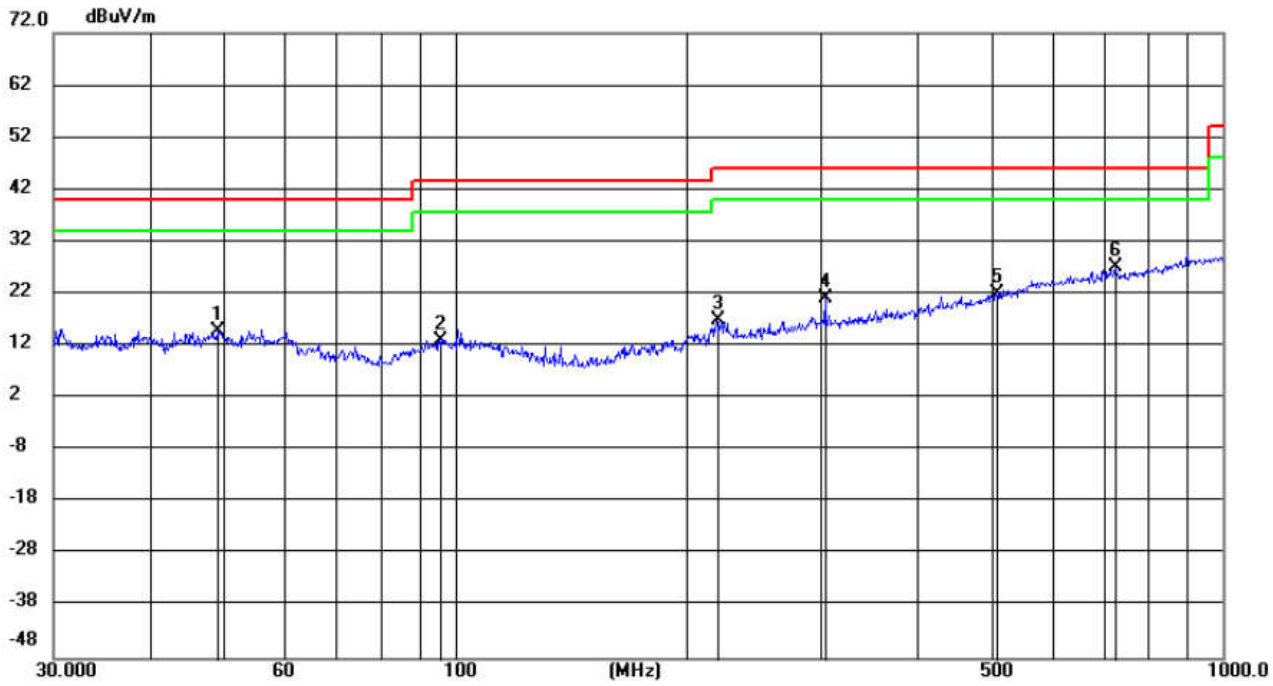
①Level[dBuV/m]=Reading[dBuV]+Factor[dB];

②Magin[dB]=Level[dBuV/m]-Limit[dBuV/m];

Spurious Emissions:

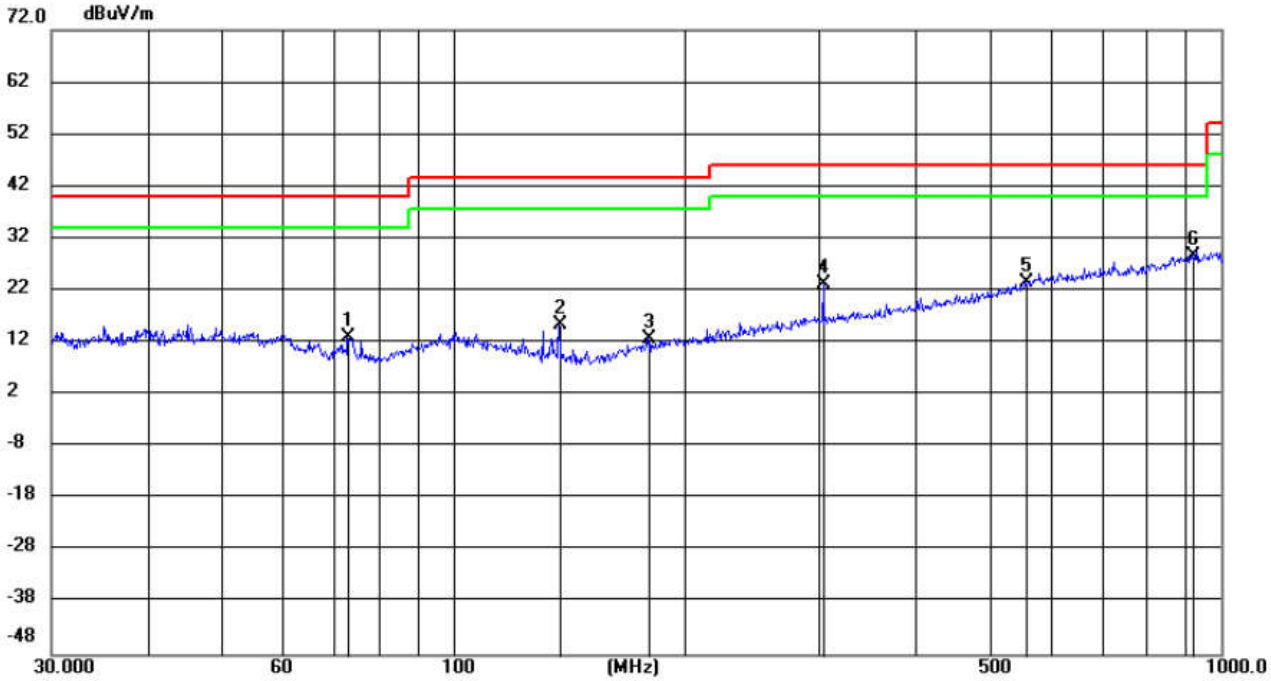
30MHz-1GHz:

Test mode:	Transmitting (lowest channel)	Vertical



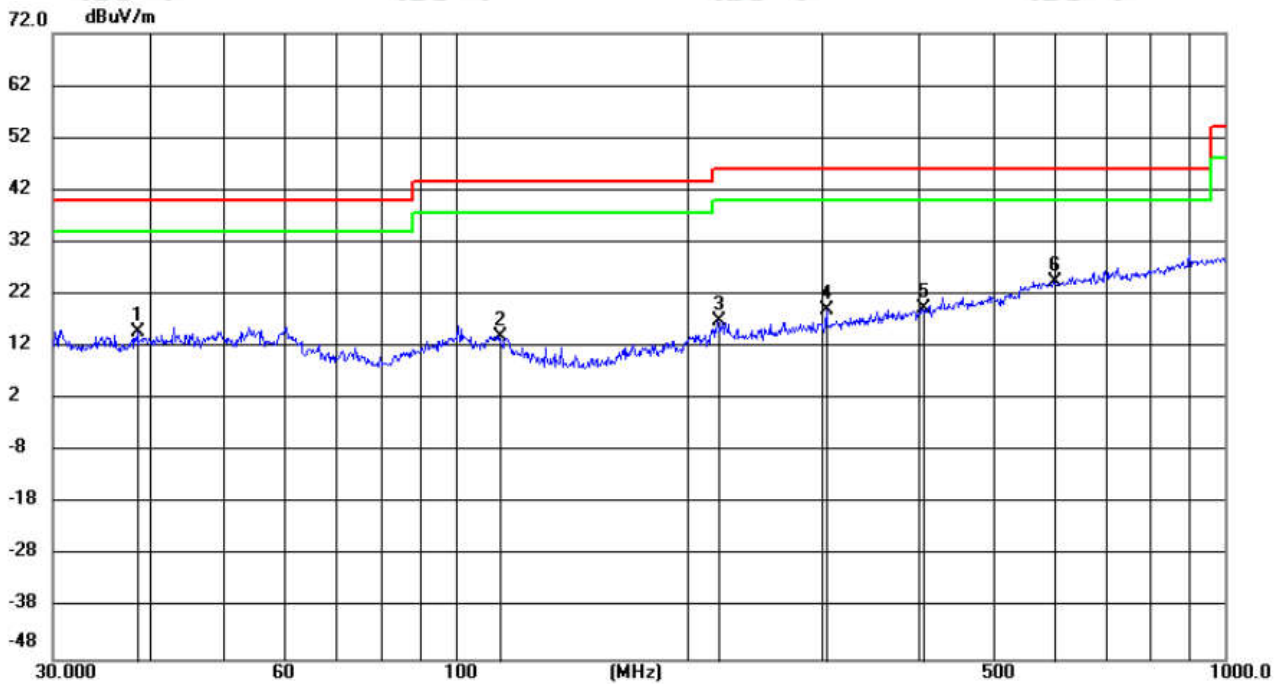
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		49.1779	0.71	14.16	14.87	40.00	-25.13	QP	100	153	
2		95.7622	0.12	12.92	13.04	43.50	-30.46	QP	100	352	
3		219.3828	3.34	13.48	16.82	46.00	-29.18	QP	100	352	
4		304.2363	4.30	16.75	21.05	46.00	-24.95	QP	200	17	
5		507.5458	1.04	21.11	22.15	46.00	-23.85	QP	100	28	
6	*	726.0410	2.60	24.63	27.23	46.00	-18.77	QP	100	352	

Test mode:	Transmitting (lowest channel)	Horizontal



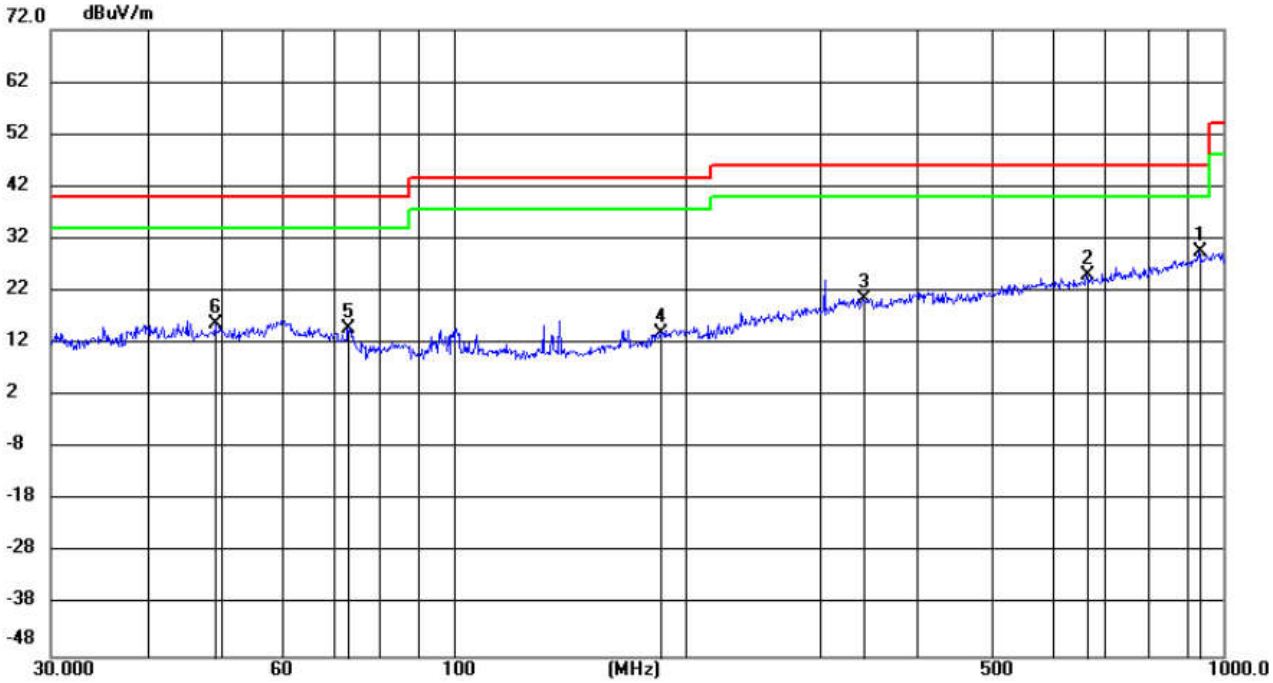
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		73.0383	2.48	10.44	12.92	40.00	-27.08	QP	100	354	
2		137.5166	5.78	9.71	15.49	43.50	-28.01	QP	100	342	
3		179.7011	1.04	11.86	12.90	43.50	-30.60	QP	100	153	
4		304.1830	6.42	16.75	23.17	46.00	-22.83	QP	199	352	
5		556.8720	1.31	22.39	23.70	46.00	-22.30	QP	100	7	
6	*	917.8371	1.02	27.52	28.54	46.00	-17.46	QP	199	207	

Test mode:	Transmitting (middle channel)	Vertical



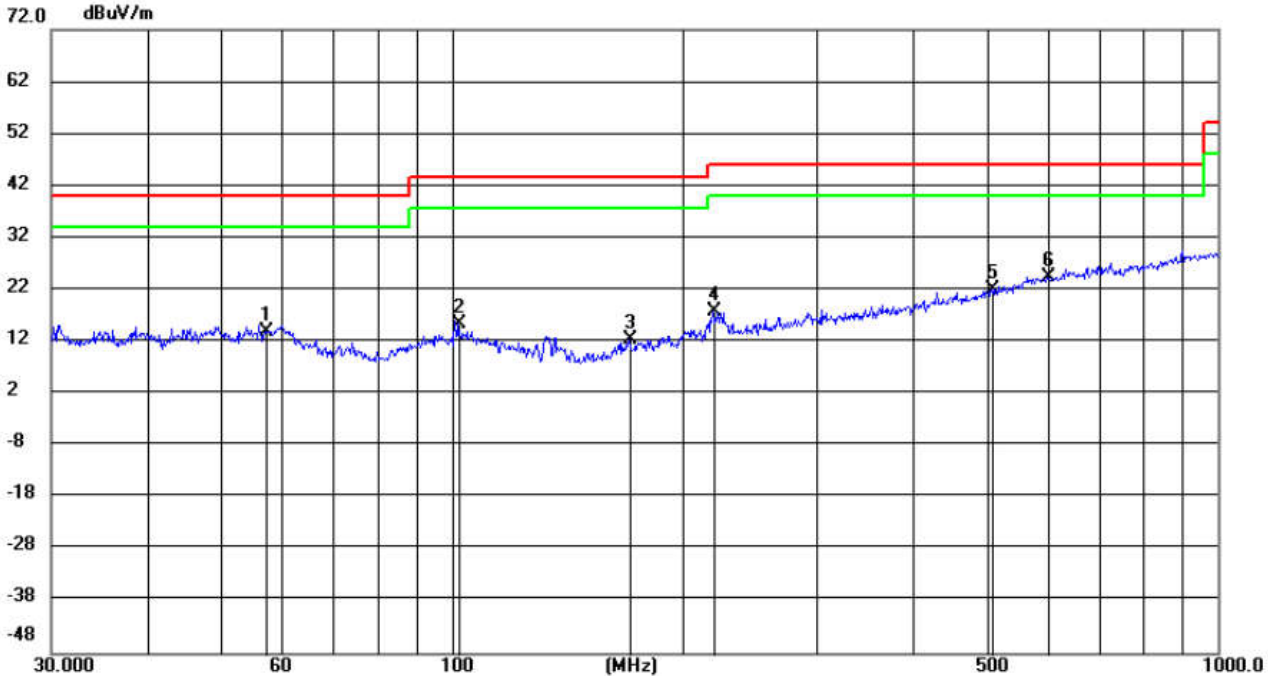
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		38.7449	0.89	13.83	14.72	40.00	-25.28	QP	100	352	
2		114.3541	1.47	12.52	13.99	43.50	-29.51	QP	200	68	
3		219.3828	3.34	13.48	16.82	46.00	-29.18	QP	100	352	
4		304.2363	2.30	16.75	19.05	46.00	-26.95	QP	200	17	
5		405.3054	0.61	18.78	19.39	46.00	-26.61	QP	200	181	
6	*	599.5313	0.86	23.51	24.37	46.00	-21.63	QP	100	352	

Test mode:	Transmitting (middle channel)	Horizontal



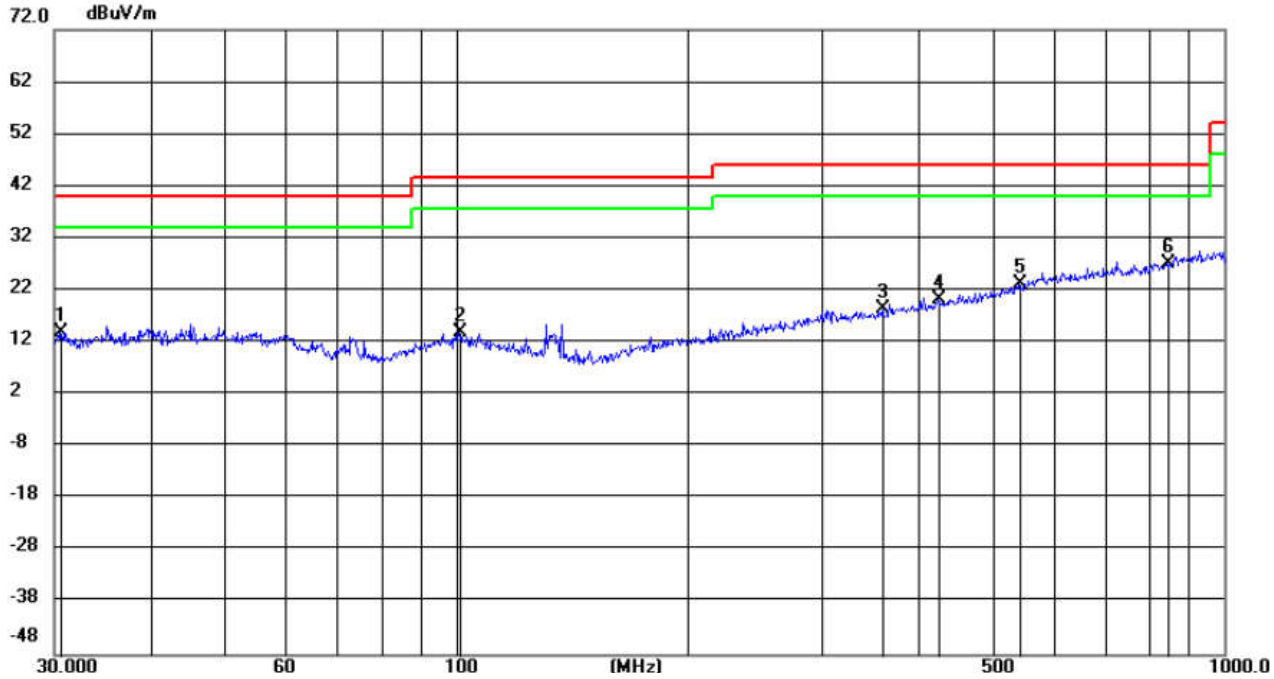
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	931.7812	1.92	27.60	29.52	46.00	-16.48	QP	199	352	
2		664.5205	1.17	23.96	25.13	46.00	-20.87	QP	199	9	
3		341.8587	3.11	17.50	20.61	46.00	-25.39	QP	100	237	
4		185.9510	1.86	12.18	14.04	43.50	-29.46	QP	199	300	
5		73.0383	4.48	10.44	14.92	40.00	-25.08	QP	100	354	
6		49.1435	1.70	14.16	15.86	40.00	-24.14	QP	199	113	

Test mode:	Transmitting (highest channel)	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		57.1512	0.55	13.53	14.08	40.00	-25.92	QP	200	325	
2		102.0908	2.01	13.45	15.46	43.50	-28.04	QP	200	48	
3		170.7624	0.61	11.73	12.34	43.50	-31.16	QP	100	321	
4		219.3828	4.34	13.48	17.82	46.00	-28.18	QP	100	352	
5		507.5457	1.04	21.11	22.15	46.00	-23.85	QP	100	28	
6	*	599.5312	0.86	23.51	24.37	46.00	-21.63	QP	100	352	

Test mode:	Transmitting(highest channel)	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.6269	1.28	12.75	14.03	40.00	-25.97	QP	199	352	
2		101.1465	0.44	13.50	13.94	43.50	-29.56	QP	199	352	
3		360.0056	0.71	17.86	18.57	46.00	-27.43	QP	100	354	
4		423.6888	1.06	19.20	20.26	46.00	-25.74	QP	100	279	
5		541.8473	1.29	22.00	23.29	46.00	-22.71	QP	100	28	
6	*	843.0158	0.65	26.50	27.15	46.00	-18.85	QP	100	142	

Above 1GHz:

Test mode:	Transmitting (lowest channel)								
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1335.6336	7.90	21.06	28.96	74.00	45.04	PASS	Horizontal	PK
2	2022.3022	9.12	21.78	30.90	74.00	43.10	PASS	Horizontal	PK
3	3576.0384	-17.76	52.94	35.18	74.00	38.82	PASS	Horizontal	PK
4	4894.1263	-13.47	65.48	52.01	74.00	21.99	PASS	Horizontal	PK
5	7878.3252	-3.99	46.33	42.34	74.00	31.66	PASS	Horizontal	PK
6	14195.7464	7.16	42.34	49.50	74.00	24.50	PASS	Horizontal	PK
7	1313.6314	7.79	23.81	31.60	74.00	42.40	PASS	Vertical	PK
8	1919.0919	8.97	22.73	31.70	74.00	42.30	PASS	Vertical	PK
9	3576.0384	-17.76	53.79	36.03	74.00	37.97	PASS	Vertical	PK
10	4894.1263	-13.47	66.16	52.69	74.00	21.31	PASS	Vertical	PK
11	7838.3226	-3.96	46.62	42.66	74.00	31.34	PASS	Vertical	PK
12	13678.7119	5.33	43.08	48.41	74.00	25.59	PASS	Vertical	PK

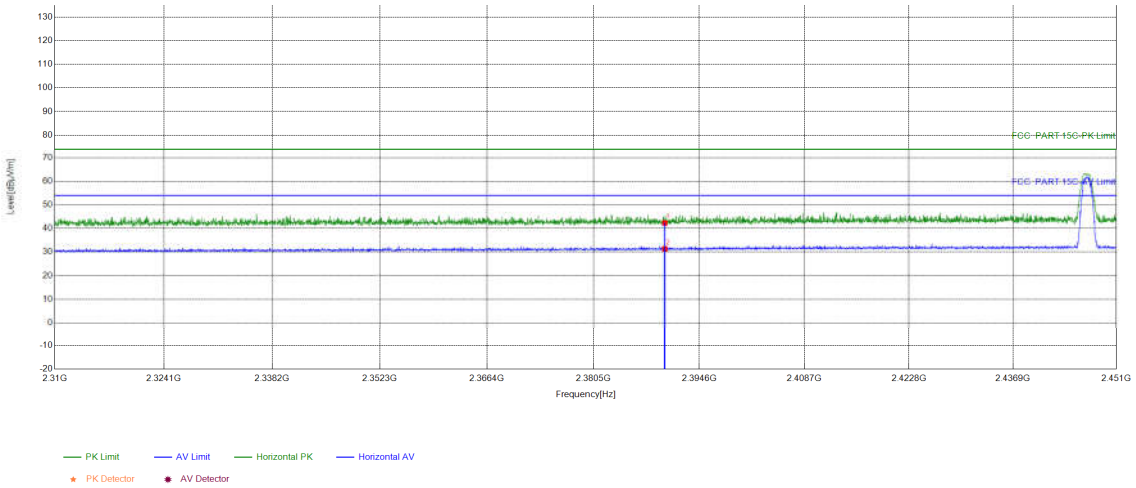
Test mode:	Transmitting (middle channel)								
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1268.6269	7.81	20.74	28.55	74.00	45.45	PASS	Horizontal	PK
2	1939.0939	8.98	21.97	30.95	74.00	43.05	PASS	Horizontal	PK
3	3772.0515	-17.40	53.00	35.60	74.00	38.40	PASS	Horizontal	PK
4	4926.1284	-13.42	66.97	53.55	74.00	20.45	PASS	Horizontal	PK
5	7869.3246	-3.99	46.56	42.57	74.00	31.43	PASS	Horizontal	PK
6	14207.7472	7.08	41.08	48.16	74.00	25.84	PASS	Horizontal	PK
7	4927.1285	-13.42	60.68	47.26	54.00	6.74	PASS	Horizontal	AV
8	1341.0341	7.93	21.72	29.65	74.00	44.35	PASS	Vertical	PK
9	1960.8961	8.97	21.84	30.81	74.00	43.19	PASS	Vertical	PK
10	3789.0526	-17.35	53.41	36.06	74.00	37.94	PASS	Vertical	PK
11	4926.1284	-13.42	66.44	53.02	74.00	20.98	PASS	Vertical	PK
12	7820.3214	-3.95	47.01	43.06	74.00	30.94	PASS	Vertical	PK
13	13709.714	4.98	43.61	48.59	74.00	25.41	PASS	Vertical	PK
14	4927.1285	-13.42	59.60	46.18	54.00	7.82	PASS	Vertical	AV

Test mode:			Transmitting (highest channel)						
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1355.4355	8.00	21.00	29.00	74.00	45.00	PASS	Horizontal	PK
2	1975.2975	8.98	21.63	30.61	74.00	43.39	PASS	Horizontal	PK
3	3286.0191	-18.11	54.13	36.02	74.00	37.98	PASS	Horizontal	PK
4	4954.1303	-13.36	61.22	47.86	74.00	26.14	PASS	Horizontal	PK
5	7807.3205	-3.95	46.49	42.54	74.00	31.46	PASS	Horizontal	PK
6	14296.7531	6.39	42.37	48.76	74.00	25.24	PASS	Horizontal	PK
7	1349.4349	7.97	21.69	29.66	74.00	44.34	PASS	Vertical	PK
8	1801.2801	8.47	22.09	30.56	74.00	43.44	PASS	Vertical	PK
9	3826.0551	-17.20	52.78	35.58	74.00	38.42	PASS	Vertical	PK
10	4954.1303	-13.36	65.37	52.01	74.00	21.99	PASS	Vertical	PK
11	7840.3227	-3.97	46.86	42.89	74.00	31.11	PASS	Vertical	PK
12	14217.7478	7.01	41.75	48.76	74.00	25.24	PASS	Vertical	PK

Restricted bands:

Test_Mode	2.4G	Test_Frequency	2447MHz
Tset_Engineer	wangzhurun	Test_Date	\
Remark			

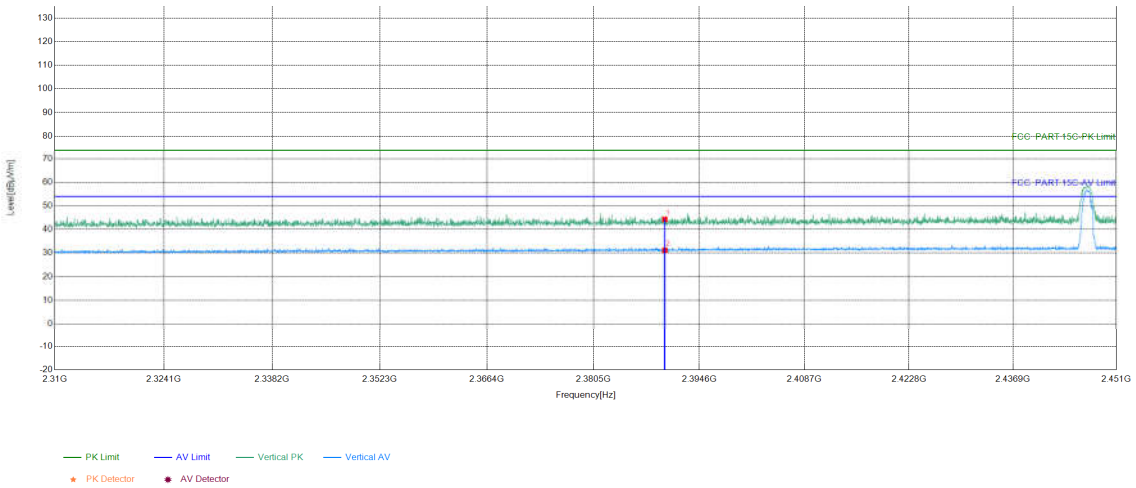
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	9.96	32.34	42.30	74.00	31.70	PASS	Horizontal	PK
2	2390	9.96	21.35	31.31	54.00	22.69	PASS	Horizontal	AV

Test_Mode	2.4G	Test_Frequency	2447MHz
Tset_Engineer	wangzhurun	Test_Date	\
Remark			

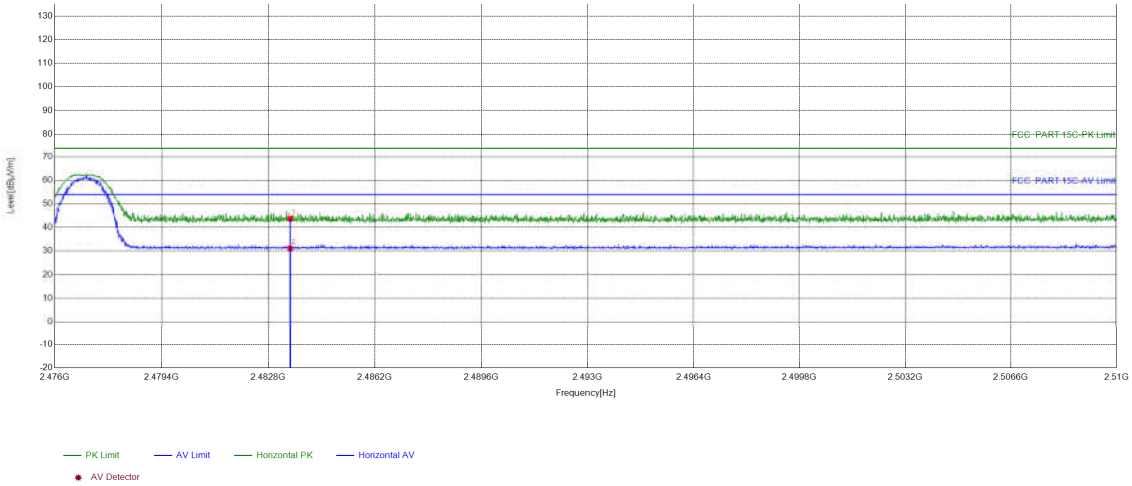
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	9.96	34.34	44.30	74.00	29.70	PASS	Vertical	PK
2	2390	9.96	21.19	31.15	54.00	22.85	PASS	Vertical	AV

Test_Mode	2.4G	Test_Frequency	2477MHz
Tset_Engineer	wangzhurun	Test_Date	\
Remark			

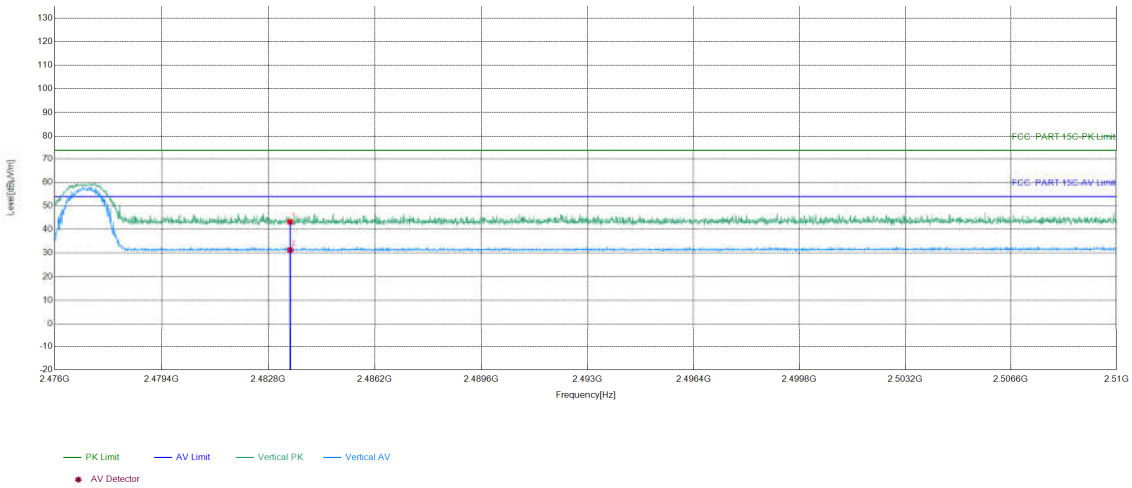
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	10.38	33.40	43.78	74.00	30.22	PASS	Horizontal	PK
2	2483.5	10.38	20.66	31.04	54.00	22.96	PASS	Horizontal	AV

Test_Mode	2.4G	Test_Frequency	2477MHz
Tset_Engineer	wangzhurun	Test_Date	\
Remark			

Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	10.38	32.80	43.18	74.00	30.82	PASS	Vertical	PK
2	2483.5	10.38	20.88	31.26	54.00	22.74	PASS	Vertical	AV

Remark:

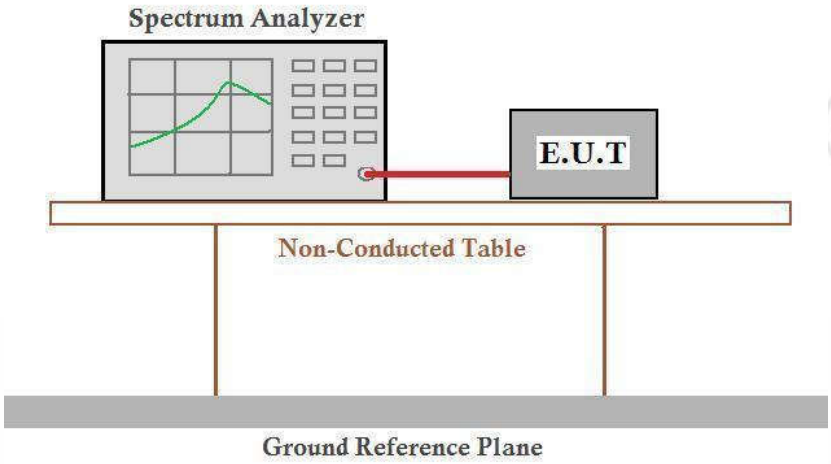
1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
   Final Test Level =Receiver Reading + Correct Factor
   Correct Factor =Antenna Factor + Cable Factor - Preamplifier Factor
2) Scan from 9kHz to 25GHz,The disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported .

6.3 20dB Bandwidth

Test Requirement: 47 CFR Part 15C Section 15.215

Test Method: ANSI C63.10: 2013

Test Setup:



Test Procedure:

Remark: Offset=Cable loss+ attenuation factor.

1) The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

2) Set to the maximum power setting and enable the EUT transmit continuously.

3) Use the following spectrum analyzer settings for 20dB Bandwidth measurement.

Span = approximately 2 to 5 times the 20 dB bandwidth, centered on a test channel; 1%≤RBW ≤5% of the 20 dB bandwidth; VBW≥3RBW;

Sweep = auto; Detector function = peak; Trace = max hold.

4) Measure and record the results in the test report.

Limit: N/A

Test Mode: Transmitter mode

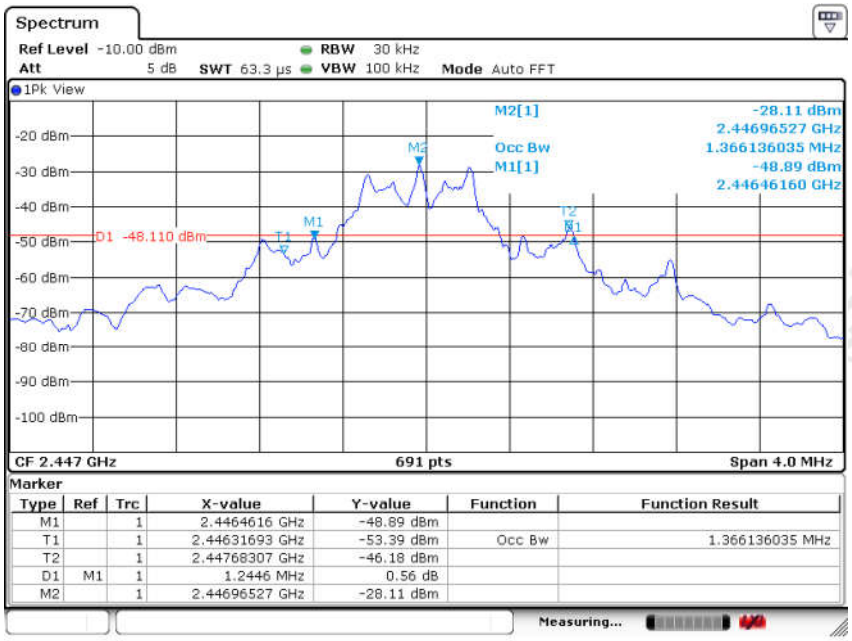
Test Results: Pass

Measurement Data

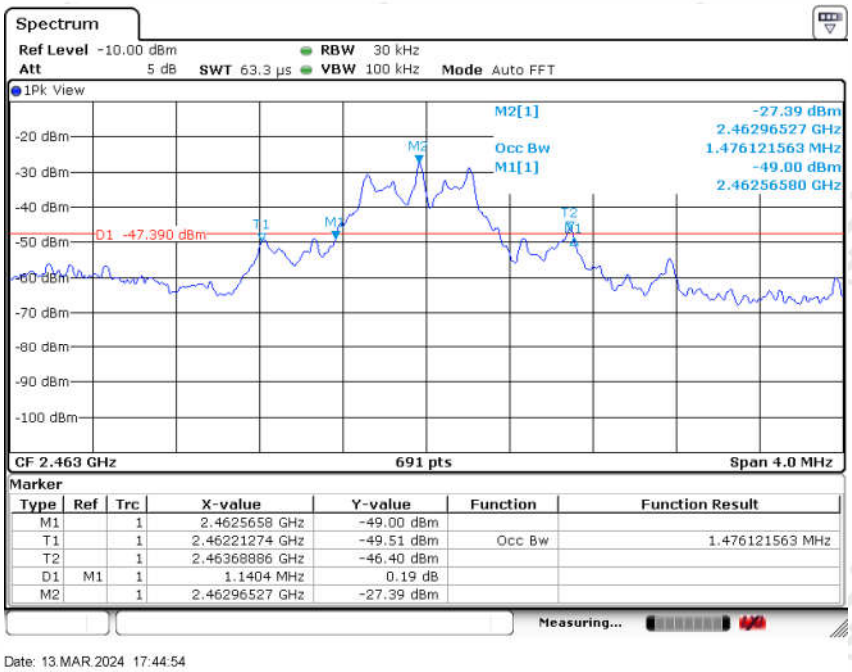
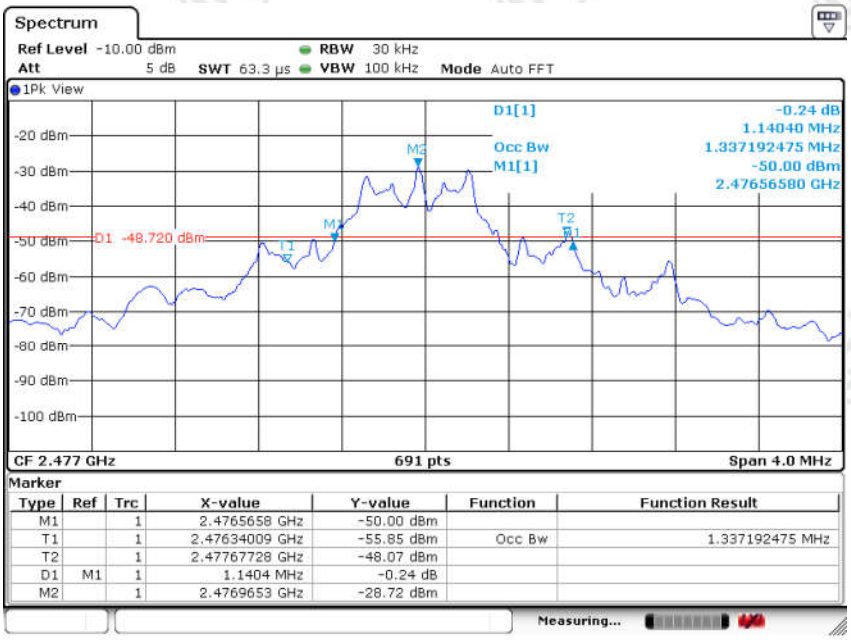
Test Channel	20dB bandwidth (MHz)	Results
Lowest	1.2446	Pass
Middle	1.1404	Pass
Highest	1.1404	Pass

Test plot as follows:

Test channel:	Lowest



Test channel:	Middle



Test channel:	Highest